# Before The FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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In The Matter Of	)
Unlicensed Operation in the TV Broadcast Bands	) ET Docket No. 04-186
Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band	) ET Docket No. 02-380
	_)

To: The Commission

### REPLY COMMENTS OF QUALCOMM INCORPORATED

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#### **SUMMARY**

QUALCOMM submits this reply, first, to urge the FCC to adhere to its proposal that unlicensed devices not be allowed to operate on the licensed spectrum that QUALCOMM acquired, Channel 55, on which QUALCOMM is launching an innovative service to deliver multimedia content to mobile devices; and, second, to express its concern that allowing unlicensed devices on any of the TV bands threatens to prolong the DTV transition, cause excessive interference to the licensed TV services, and depress the value of licensed spectrum. If there are vacant channels that can be used without causing excessive interference and delaying the DTV transition, the FCC should permit licensed, not unlicensed, services on the spectrum.

On the first point, as QUALCOMM showed in its Comments, QUALCOMM cannot launch its highly beneficial MediaFLO<sup>TM</sup> service on the licensed spectrum that it paid for if the FCC were to allow unlicensed devices on Channel 55 or Channels 54 and 56, thereby changing the rules on which QUALCOMM relied when it acquired its licenses, invented its technology, and designed its network. As it is, QUALCOMM faces the challenge of launching MediaFLO, which uses the forward link only over Channel 55 and a few transmitters per market, while some TV stations remain on this spectrum until the DTV transition ends. The NPRM correctly proposed that unlicensed devices not be allowed on Channels 52-69 to avoid difficulties over sharing of the spectrum by the new licensees who paid for the spectrum, such as QUALCOMM, and unlicensed operators seeking to use the same spectrum for free. NPRM at para. 34.

In its comments, Microsoft, a leading advocate for unlicensed operations in the TV bands, conceded that the Commission was correct in proposing that unlicensed devices not be allowed to operate on Channels 52 to 69. Microsoft Comments at Pg. 19. Other supporters of

unlicensed operations in the TV bands, such as Intel and Motorola, likewise did not take issue with the FCC's proposal to exclude unlicensed devices from Channels 52 to 69.

But, the comments of the New America Foundation, the Media Access Project, and others (the "NAF/MAP Comments") asked the FCC to reconsider its exclusion of Channels 52 to 69 from unlicensed use. NAF/MAP Comments at Pg. 11. NAF/MAP did not show that unlicensed devices and the Lower 700 MHz licensees, such as QUALCOMM, can feasibly share the spectrum, but QUALCOMM showed that it cannot share its spectrum with unlicensed devices. QUALCOMM Comments at Pgs. i, 3. The FCC should not reconsider the exclusion.

Moreover, NAF/MAP incorrectly assume that the FCC is proposing to postpone unlicensed use of Channels 52-69 until the DTV transition ends, a proposal not in the NRPM.

NAF/MAP argue that if the FCC postpones unlicensed operations on Channels 52 to 69 until the DTV transition ends, the public will be deprived of any benefits from use of the bands because the transition may not end soon. This argument ignores QUALCOMM's substantial efforts and planned investment of over \$800 million to launch MediaFLO on its Channel 55 spectrum.

QUALCOMM, through its MediaFLO<sup>TM</sup> USA Inc. subsidiary, will launch MediaFLO in as wide a footprint as possible even before the DTV transition ends. In fairness, NAF/MAP may not have been aware of QUALCOMM's launch of MediaFLO since their Comments assume incorrectly that Channels 52 to 69 cannot be used at all until the DTV transition ends.

QUALCOMM acquired its licenses for Channel 55 on the premise that the spectrum would not be encumbered with unlicensed devices before, during, or after the DTV transition, a premise based upon the FCC's rules. It would be unfair and unwise for the FCC to change its rules now, after QUALCOMM paid for its spectrum and is launching services on it and without any technical showing that the spectrum can be shared. There is no basis --technical, economic,

legal, or otherwise -- to require QUALCOMM to share its licensed spectrum with unlicensed devices using it for free, and it is not feasible for QUALCOMM to do so. Such a requirement would chill investment, depress the value of licensed spectrum, lower the prices that bidders will pay at future auctions, and needlessly deprive Americans of the beneficial MediaFLO service.

NAF/MAP claim that Congress has displayed no preference for licensed services over unlicensed services. This is not true with respect to Channels 52 to 69. Congress specifically directed that the FCC reclaim Channels 52 to 69 and auction it. 47 U.S.C. Secs. 309 (j) (14) (entitled "Auction of recaptured broadcast television spectrum"), 309 (j) (14) (3) ("Spectrum entitled reversion and resale"). Congress did not enact any corresponding provision directing that there be unlicensed operations on these bands. Thus, Congress expressed an unmistakably clear preference for deployment of licensed services on this spectrum.

NAF/MAP point to Section 3002 (c) (1) (C) (v) of the Balanced Budget Act of 1997 ("BBA"), which deals with spectrum that had already been allocated or authorized for unlicensed. In the BBA, Congress required the FCC to auction at least 55 MHz below 3 GHz by September 30, 2002, including 2110-2150 MHz and 15 MHz from 1990-2110 MHz. In the provision that NAF/MAP cites, Congress forbid the FCC from meeting that requirement by auctioning any spectrum already allocated or authorized for unlicensed if the licensed services would interfere with the unlicensed incumbents. The provision has nothing to do with Channels 52 to 69. There are no unlicensed incumbents there, and the spectrum is not already allocated for unlicensed. NAF/MAP is mistaken, and the FCC should adhere to the NPRM's proposal that unlicensed devices not be permitted on Channels 52 to 69.

Turning to the second issue, whether the Commission should authorize unlicensed devices to operate on any of the TV channels below Channel 52, it is important to note that the

initial comments from the advocates for unlicensed operations envision mobile devices transmitting and receiving in these bands. It is very difficult to control or mitigate interference from tens or hundreds of thousands or even more unlicensed mobile transmitters in a given market, not to mention migrating from market to market, under these circumstances.

NAB/MSTV submitted test results from the Communications Research Centre Canada ("CRC"). CRC found that if unlicensed devices operate at the FCC's proposed power limits, a DTV receiver within 24 meters would be desensitized by as much as 11 dB, and NTSC receivers fare worse. See NAB/MSTV Comments at Exhibit A, Pg. 29. It remains to be seen whether it will be technically and economically feasible to design devices to avoid this interference.

Indeed, the parties favoring unlicensed use of the TV bands did not show why the FCC should not authorize licensed, not unlicensed, services in these bands, if there are vacant channels that can be used without causing harmful interference. Microsoft assumed that the only wireless broadband service is unlicensed—they do not even refer to the EV-DO and WCDMA wireless broadband services now offered on licensed spectrum by Verizon Wireless and Cingular in a growing number of markets. NAF/MAP argue that First Amendment principles weigh heavily in favor of opening new spectrum to unlicensed use. NAF/MAP Comments at Pg. 5.

This argument has no support in court or FCC decisions. The FCC does not violate the First Amendment by fulfilling its statutory mandate to issue licenses. 47 U.S.C. Sec. 307.

QUALCOMM asks that the FCC reexamine the NPRM's assumption that service on the vacant TV channels, if feasible, would have to be unlicensed, in light of the facts that it is very difficult to control or mitigate interference from mobile unlicensed transmitters and it depresses the value of all licensed spectrum for the FCC to give away such prime spectrum to large companies for free.

## **TABLE OF CONTENTS**

	Summary i
I.	The Commission Should Adhere to the NPRM's Proposal That Unlicensed Devices Not Be Permitted to Operate on Channels 52 – 69
II.	The Commission Should Not Authorize Unlicensed Devices Below Channel 52
A.	The Record Shows That Allowing Unlicensed Devices to Operate on TV Bands Below Channel 52 Will Cause Harmful Interference to TV Sets 6
В.	The Record Shows That Allowing Unlicensed Devices in the TV Bands Below Channel 52 Will Prolong the DTV Transition
C.	Any Use of TV Bands Below Channel 52 Should Be Licensed, Not Unlicensed
III.	Conclusion

# Before The FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

T Docket No. 04-186
T Docket No. 02-380

To: The Commission

#### REPLY COMMENTS OF QUALCOMM INCORPORATED

QUALCOMM Incorporated ("QUALCOMM") hereby submits its Reply Comments in this proceeding, which was initiated by the <u>Notice of Proposed Rule Making</u>, FCC 04-113, released May 25, 2004, ("<u>NPRM</u>"), in which the Commission proposed allowing unlicensed devices to operate on the so-called vacant channels in the TV bands within Channels 5-36 and 38-51.

These Reply Comments make two main points: 1) the FCC should adhere to its proposal in the NPRM that unlicensed devices not be allowed to operate on the licensed spectrum that QUALCOMM acquired, Channel 55, on which QUALCOMM is launching its MediaFLO service to deliver multimedia content to mobile devices; and, 2) allowing unlicensed devices on any of the TV bands threatens to prolong the DTV transition, cause harmful interference to the licensed TV services, and depress the value of licensed spectrum. If there are vacant channels that can be used without causing harmful interference and delaying the DTV transition, the Commission should permit licensed, not unlicensed, services on the spectrum.

# I. The Commission Should Adhere to the NPRM's Proposal That Unlicensed Devices Not Be Permitted to Operate on Channels 52-69

As noted, <u>supra</u>, the <u>NPRM</u> proposed that unlicensed devices not be permitted on Channels 52 to 69 based upon the following rationale:

In view of our reallocation of channels 52-69 from television to other services, we are further proposing not to allow unlicensed devices on those channels. While channels 52-69 continue to be used for TV broadcasting pending completion of the DTV transition, they are available for new uses in areas where they are not used for television service. In order to avoid potential sharing difficulties between new uses and unlicensed operations, we believe the most prudent course is simply to preclude unlicensed devices from those channels at the outset of the new authorization proposed herein.

#### NPRM at para. 34.

Nothing in the record of this proceeding undermines the Commission's reasoning in the slightest or should persuade the Commission to reach a different conclusion. To the contrary, in QUALCOMM's Comments, QUALCOMM showed that it cannot launch its MediaFLO service on the Channel 55 spectrum it acquired at auction and thereafter if the Commission were to permit unlicensed devices on Channel 55 or the adjacent Channels 54 and 56. QUALCOMM Comments at Pgs. i, 3. QUALCOMM showed further that launching the MediaFLO service will require an investment of over \$800 million over the next four to five years. Id. at Pg. 3.

Licensees cannot make investments of that magnitude if the Commission is going to allow unlicensed devices operate on their licensed spectrum for free. In QUALCOMM's case, it is especially important that the Commission not allow unlicensed devices on QUALCOMM's licensed spectrum because to launch its MediaFLO service, QUALCOMM already has to contend with the challenge of achieving the greatest possible footprint in the face of analog TV stations who are still on Channels 54, 55, and/or 56 in many markets.

For its part, Microsoft, one of the most ardent supporters of unlicensed operations in the TV bands, conceded that the Commission was correct in not proposing that unlicensed devices be allowed on Channels 52 to 69. Microsoft Comments at Pg. 19 ("Microsoft understands that researchers use channel 37 for sensitive radio astronomy operations and that the Commission has recently reallocated channels 52 to 69. But Microsoft believes the exclusion of channels 2-4 and 14-20 is unnecessary.").

Similarly, other outspoken advocates for unlicensed operations in the TV bands, such as Intel and Motorola, did not take issue with the Commission's proposal to exclude Channels 52 to 69. See Intel Comments at Pgs. 4-5 (calling the Commission's proposal to allow unlicensed operations on Channels 5-36 and 38-51 "a very fitting solution"); Motorola Comments at Pg. i ("Motorola supports the Commission's efforts to allow unlicensed operations on vacant channels in the broadcast TV spectrum below Channel 52, as long as incumbent operations are fully protected."). Thus, the leading companies interested in developing unlicensed devices and services on the TV bands do not quarrel with the Commission's proposal not to permit unlicensed operations on Channels 52-69.

Nevertheless, one set of comments filed by the New America Foundation, the Media Access Project, and several other groups (the "NAF/MAP Comments") asked the Commission to reconsider its proposal and to "move expeditiously" to make Channels 52-69 available for unlicensed use. The NAF/MAP Comments do not contain a single word to support the notion that unlicensed devices can actually co-exist with the new services being launched on this spectrum, such as QUALCOMM's MediaFLO service. Thus, the NAF/MAP Comments do not provide any basis for the Commission to come to a different conclusion than the one reached in

the <u>NPRM</u> that there would be "difficulties" in the new services sharing the spectrum with unlicensed devices. <u>NPRM</u> at para. 34.

Rather than providing any technical basis for the Commission to change its proposal in the NPRM, the NAF/MAP Comments start from the false premise that the Commission is merely proposing that unlicensed devices not be allowed on Channels 52-69 until completion of the DTV transition, when the analog TV stations vacate the spectrum, and there is "final resolution" of other uses of the spectrum. NAF/MAP Comments at Pg. 11. That is not the Commission's proposal. The NPRM clearly states that unlicensed devices will not be allowed on Channels 52-69, period, and does not speak of any postponement until a date when unlicensed devices would be allowed on the spectrum. NPRM at para. 34. The "final resolution" of Channel 55 is that QUALCOMM has been awarded licenses covering the entire nation and is launching MediaFLO on it. NAF/MAP Comments address a proposal that the Commission simply has not made.

The NAF/MAP Comments then go on to say that if the Commission postpones allowing unlicensed devices on Channels 52-69 until the DTV transition ends, then the American public will be deprived of the valuable services that could be deployed on this spectrum. NAF/MAP Comments at Pg. 11. This argument is based on a faulty premise—that there are no new services that can be deployed on the spectrum until the DTV transition ends. In fact, as explained herein and in QUALCOMM's Comments, QUALCOMM is in the midst of launching its MediaFLO service on Channel 55, and in those markets where there is no station on Channel 55 and in which QUALCOMM can comply with the Commission's technical rules to protect the adjacent channels, QUALCOMM can launch its service before the DTV transition ends. In fairness to NAF/MAP, they may not have been aware of QUALCOMM's launch of MediaFLO on Channel 55 because their comments appear to assume incorrectly that if the Commission does not allow

unlicensed use of Channels 52-69 that the spectrum will be unused. In truth, the American public will be deprived of a valuable service if the Commission were to allow unlicensed devices onto Channels 52-69, which would preclude QUALCOMM from launching MediaFLO at all.

NAF/MAP also ignore a fundamental point about the need for the Commission to maintain clear and predictable rules governing licensed spectrum. QUALCOMM acquired its spectrum, invented its technology, and is launching its service, all in reliance on the fact that there are no unlicensed devices permitted on Channels 52-69. For the Commission to reverse course now would be grossly unfair and unwise. Such a reversal would chill investment, depress the value of licensed spectrum, lower the prices that bidders will pay for licenses at future FCC auctions, and, above all, needlessly deprive the American public of the beneficial MediaFLO service.

Finally, NAF/MAP assert that Congress has displayed no preference for licensed services over unlicensed services, and they cite Section 3002 (c) (1) (C) (v) of the Balanced Budget Act of 1997 ("BBA"). This provision has nothing to do with Channels 52 to 69. The BBA provision deals with spectrum that had already been allocated or authorized for unlicensed use. In the BBA, Congress required the FCC to auction at least 55 MHz below 3 GHz by September 30, 2002, including 2110-2150 MHz and 15 MHz from 1990-2110 MHz. In the provision cited by NAF/MAP, Congress forbid the FCC from meeting that requirement by auctioning any spectrum already allocated or authorized for unlicensed if the licensed services would interfere with the unlicensed incumbents. But, the Channel 52 to 69 spectrum is not allocated or authorized for unlicensed use, and so there are no unlicensed incumbents. Thus, this provision in the BBA has nothing to do with whether the Commission should or should not permit unlicensed devices to operate on Channels 52 to 69.

On the other hand, Congress did expressly require the Commission to auction licenses for Channels 52 to 69. In the same BBA enacted in 1997, Congress specifically directed that the FCC reclaim Channels 52 to 69 and auction that spectrum. 47 U.S.C. Secs. 309 (j) (14) (entitled "Auction of recaptured broadcast television spectrum"), 309 (j) (14) (3) ("Spectrum entitled reversion and resale"). Congress did not enact any corresponding provision to provide for unlicensed operations on these bands. Thus, Congress expressed an unmistakably clear preference for deployment of licensed services on this spectrum.

For all of these reasons, the Commission should adhere to the proposal in the <u>NPRM</u> that unlicensed devices not be permitted on Channels 52 to 69.

#### II. The Commission Should Not Authorize Unlicensed Devices Below Channel 52

In its Comments, QUALCOMM expressed concern that allowing unlicensed devices to operate below Channel 52 will cause excessive interference to the licensed TV services, threatens to prolong the DTV transition, and will depress the value of licensed spectrum.

QUALCOMM Comments at Pgs. i, 7-11. Even if these problems could be overcome,

QUALCOMM noted that the NPRM contained no analysis for why there should be unlicensed, as opposed to licensed, use of the vacant channels. Id. at Pgs. ii, 11-12. These problems were highlighted by the other comments filed in this proceeding.

# A. The Record Shows That Allowing Unlicensed Devices to Operate on TV Bands Below Channel 52 Will Cause Harmful Interference to TV Sets

The NAB/MSTV Comments include a study based on testing conducted by the Communications Research Centre Canada ("CRC"). See Exhibit A to NAB/MSTV Comments. The study found that if unlicensed devices operate at the FCC's proposed power limits, a DTV receiver within 24 meters would be desensitized by as much as 11 dB, and the desensitization to NTSC receivers will be even worse. See id.at Pg. 29. It remains to be seen whether it would be

technically and economically feasible to design unlicensed devices that would avoid this interference. Cf. Microsoft Comments at Pg. 16 (discussing the need for the Commission to adopt the least costly interference mitigation techniques).

There is no corresponding study filed by any of the advocates of unlicensed operations in the TV bands containing test results to show the absence of interference. To the contrary, Microsoft's Comments urge the Commission to rely on spectrum sensing radios that do not yet exist. Microsoft Comments at Pg. 14. Microsoft initially calls these radios "a reality," but later concedes that manufacturers are "testing and may be deploying" such radios in the 5 GHz band to avoid radars. Id. The Commission should not, and indeed cannot, rely on radios that are not yet deployed anywhere to mitigate interference to the licensed TV services. Likewise, Intel submits a link budget for spectrum sensing radios, but does not submit any test results to show how these radios will work in the field. Intel Comments at Pgs. 15-17.

Motorola takes the position that while spectrum sensing radios show promise, further testing studies must be conducted. Motorola Comments at Pgs. 15-16. As Motorola puts it:

Motorola believes the burden of presenting convincing evidence of the reliability of spectrum sensing technology under a wide variety of environments and conditions should be on the proponents of the technology. Although the technology appears promising, Motorola recommends that the Commission support further experimentation with the technology, but not permit spectrum sensing until its reliability is proven.

Motorola Comments at Pg. 16.

Finally, no commenter explained how interference from these mobile unlicensed devices, once they are in use, could ever be mitigated. While Part 15 would require such mitigation, it is

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<sup>&</sup>lt;sup>1</sup> Moreover, using spectrum sensing radios to detect radars, which transmit, is far different than using them in the TV bands, where they need to detect passive TV receivers. In the latter case, the spectrum sensing radio might not see a TV signal, but there could be TV receivers in proximity of the radio that are receiving before the radio transmits.

impractical to believe that it could ever be accomplished. This is yet another reason for the Commission not to allow unlicensed devices into the licensed TV bands, given that the record does not contain any real world testing to show the absence of interference.<sup>2</sup>

#### B. The Record Shows That Allowing Unlicensed Devices in the TV Bands Below Channel 52 Will Prolong the DTV Transition

In its comments, QUALCOMM showed that allowing unlicensed devices in the TV bands will prolong the DTV transition because: 1) TV stations are now in the midst of a complex channel selection process, and it would be difficult for stations to complete that process if unlicensed devices are introduced in the TV bands below Channel 52 in the midst of that process; and, 2) consumers will be reluctant to purchase expensive new DTV-capable sets if they experience interference (and they will not even know that the interference is caused by an unlicensed device). QUALCOMM Comments at Pgs. 7-9.

Other commenters raised similar concerns. For example, NAB/MSTV wrote that allowing unlicensed devices in the TV bands below Channel 52 could derail the DTV transition. NAB/MSTV Comments at Pgs. 3-6. Cox Broadcasting argued that too many DTV and spectrum-related questions, including questions about the channel selection process and the nature of DTV operations (multicasting, high definition, distributed transmission, etc.), are unsettled and will remain so until the transition ends, and the Commission should not permit

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<sup>&</sup>lt;sup>2</sup> Perhaps in recognition of the impracticality of mitigating the interference from unlicensed devices after consumers start using them, NAF/MAP made an ex parte filing suggesting that Part 15 devices should have co-primary status with licensed services so that in the event of interference, the burden would not be on the Part 15 device manufacturer to mitigate the interference. NAF/MAP Ex Parte, December 14, 2004. This argument asks the Commission to undertake a radical redefinition of the rights of licensees and to overturn Commission rules that have been in place for decades. The Commission should decline to do so. Simply put, no one will buy licensed spectrum or make investments to deploy services on licensed spectrum if the Commission were to give away free access to the same spectrum and to rule that the free users have the same rights as licensees.

unlicensed devices to operate on the TV bands before these questions are resolved. Cox Broadcasting Comments at Pgs. 5-6. Pappas Broadcasting put it this way: "The introduction of a new service to operate in the TV Band prior to the completion of the enormously costly DTV transition has the potential to wreak havoc on the television industry." Pappas Broadcasting Comments at Pg. 7.

Bringing the DTV transition to an expeditious end has long been one of the Commission's paramount objectives. The Commission should not jeopardize completion of the DTV transition by authorizing untested unlicensed devices into the TV bands below Channel 52.

## C. Any Use of TV Bands Below Channel 52 Should Be Licensed, Not Unlicensed

No commenter established any reason why if there are vacant channels that can be used without causing harmful interference to licensed TV service, the use should be unlicensed as opposed to licensed. An examination of the comments filed by Microsoft, Intel, and Motorola bears this out. Microsoft's Comments go on at great length about the benefits to the public that flow from wireless broadband. Microsoft Comments at Pgs. ii, 1-7. In this discussion, Microsoft never mentions or acknowledges the rapidly proliferating wireless broadband services provided on licensed spectrum by wireless carriers using the various 3G technologies, such as 1xEV-DO and WCDMA. The Commission cannot simply pretend that these services and technologies do not exist and leap to the conclusion that the most beneficial use of vacant channels on the TV bands below Channel 52, if such channels can be used without causing harmful interference, is unlicensed.

Similarly, Intel avoids dealing with this issue and presumes that any use of the vacant TV channels below Channel 52 has to be unlicensed. Intel says that it would "vastly improve spectrum management" for the Commission to authorize unlicensed operations below Channel

52 without ever explaining just why the operations should be unlicensed, not licensed. Intel Comments at Pg. i.<sup>3</sup>

Likewise, Motorola wrote as follows:

Unlicensed access to unused TV broadcast channels would provide additional resources to realize seamless mobility, whereby users' communications travel seamlessly across conjoining user domainsfrom home to car, to the metro, to the office and beyond- with the transition between networks transparent to the user.

Motorola Comments at Pg. B-1.

The record now before the Commission does not establish why the Commission should authorize unlicensed, as opposed to licensed, operations on these channels below Channel 52. This is a fundamental omission. If service can be provided on these channels without causing harmful interference to existing licensed services, the Commission should authorize it as a licensed service so that the public fisc is protected. There is no reason to give away prime spectrum to large companies who can more than afford to pay for it.

NAF/MAP make the novel argument that First Amendment considerations "weigh heavily" in favor of permitting unlicensed use of the licensed broadcast spectrum. NAF/MAP Comments at Pgs. 4-8. This argument simply has no support in any judicial or FCC decision. NAF/MAP rely mostly on Red Lion (Red Lion Broadcasting Co., Inc. v. FCC, 395 U.S. 367 (1969)), which had nothing to do with unlicensed use of licensed spectrum and instead upheld

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<sup>&</sup>lt;sup>3</sup> Intel does make the cryptic comment that "it would incentivize manufacturers to develop new, unlicensed wireless communications products and services capable of exploiting synergisms with existing TV broadcast services and digital television ("DTV"), thereby benefiting both consumers and broadcasters." Intel Comments at Pg. i. Left unexplained is that if the Commission were to authorize licensed services in the TV bands, manufacturers would likewise have an incentive to develop new products and services for that frequency band.

the Commission's authority to enforce two aspects of the fairness doctrine.<sup>4</sup> The fact that the First Amendment permits the Commission to regulate the use of licensed spectrum says nothing about whether the Commission is somehow constitutionally compelled to permit unlicensed use of licensed spectrum. The notion that the Commission acts unconstitutionally by carrying out its statutory mandate to issue licenses in 47 U.S.C. Sec. 307 has no support in law and should not be a factor in the Commission's decision as to authorize unlicensed or licensed use of vacant channels in the TV bands, if such use is feasible.

In fact, the Commission should only authorize any operations on these channels if they can be shown not to cause harmful interference to the licensed TV services and not to interfere with the expeditious completion of the DTV transition, a fundamental policy goal of the Commission's for quite some time now. The record establishes to the contrary: such operations will cause harmful interference and will prolong the DTV transition.

#### III. Conclusion

For the foregoing reasons, QUALCOMM respectfully requests that the Commission adhere to its proposal not to permit unlicensed devices to operate on Channels 52 to 69.

QUALCOMM respectfully requests further that the Commission reexamine whether to permit unlicensed devices to operate below Channel 52 in light of the following factors now established in the record: 1) the absence of any definitive testing to prove that these unlicensed devices will not cause excessive interference to licensed services; 2) the need to complete the DTV transition as quickly as possible, a goal that could well be undermined if the Commission allows

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<sup>&</sup>lt;sup>4</sup> NAF/MAP also rely on other cases, which like <u>Red Lion</u>, simply uphold the FCC's authority to regulate broadcast licensees and say nothing about whether the Commission is compelled by the First Amendment to permit unlicensed use of the licensed broadcast bands. <u>See NAF/MAP Comments (citing National Broadcasting Co. v. United States</u>, 319 U.S. 190 (1943); <u>FCC v. National Citizens Committee for Broadcasting</u>, 436 U.S. 775 (1978); <u>Office of Communication</u> of the United Church of Christ v. FCC, 359 F.2d 994 (D.C. Cir. 1966).

unlicensed devices below Channel 52; and, 3) if there are vacant TV channels that can be used without causing interference or jeopardizing the DTV transition, the spectrum should be auctioned and used for licensed services.

## Respectfully submitted,

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